Comments on Staff's Assessment of Infrastructure Needs

California Energy Commission Workshop

May 16, 2005

Sacramento

Stillwater Associates LLC

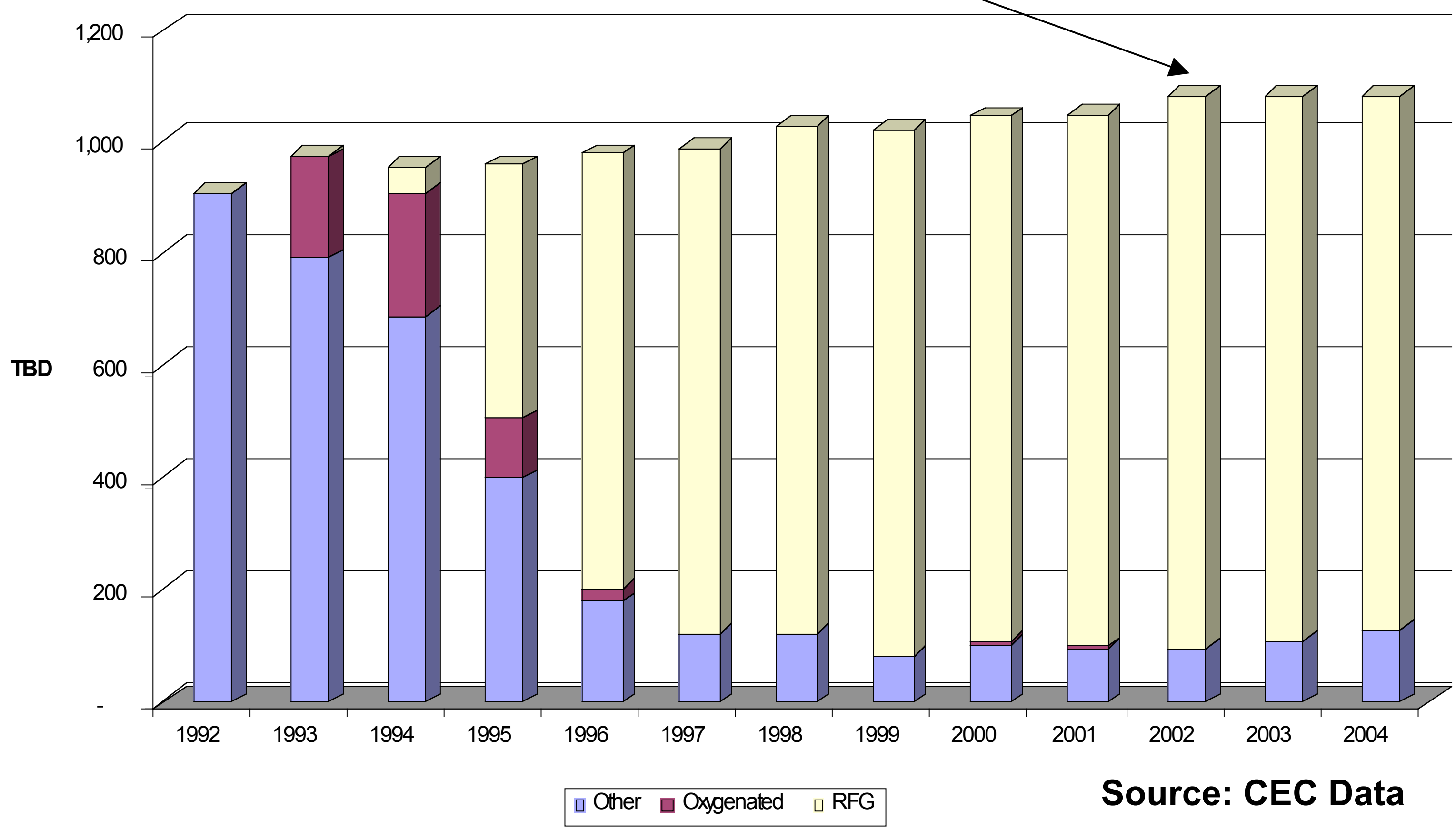
- Energy consultancy based in Irvine
- Focus of practice: energy policy, energy technology, mergers & acquisitions, litigation support
- Stillwater consultants have over 80 years of industry experience
- Work conducted on domestic energy infrastructure issues
  - 2002 study for the CEC the feasibility of creating a strategic fuels reserve
  - 2002 study for the CEC on impact of MTBE phase out
  - 2002 study for SCAQMD, CEC, and WSPA on Rule 1178 (Tank Domes)
  - 2003 study for the U.S. Dept. of Energy's Energy Information Administration on the impact of the NY/CT MTBE bans
  - 2004 study of boutique gasoline issues for the American Petroleum Institute
- Recently worked with Oxbow, LAXT, and Oiltanking on a terminal in POLA

Staff's Analysis

- Stillwater concurs with most of staff's analysis
  - Infrastructure is highly utilized and high cost
    - These costs are passed through to consumers
    - The costs are at least 1 cpg ($250 million per year on clean products)
  - Currently the trend in infrastructure capacity is mixed
    - Some new capacity has been built on existing permits
    - Other new projects are struggling to obtain permits
    - Some existing terminals are being pressured to shut down
  - State refinery expansions are not keeping up with demand growth
  - CEC needs to have a role in ensuring that petroleum infrastructure grows with demand
    - There does not seem to be an appeals process on permits
    - The public needs to be aware of the supply/demand issues

California Gasoline Production

Production Peaked in 2002 at 1088 TBD



Source: CEC Data

Comments/Recommendations

- We applaud that staff is highlighting needed refinery expansions
  - Shows government's change of attitude since 2001
- Staff should describe product import forecasts in terms of refinery equivalents
  - Each billion gallons per year is about half a new refinery
  - Staff should seek info on offshore refinery expansions
- Encourage new/additional competition
  - Recognition of independent traders is good
  - As is recognition of independent terminal operators
- Crude oil – enough business for only one new terminal in LA
  - VLCC requirement is not critical
- Continue to ask for the oxy waiver
  - However, 10% ethanol blending does extend the gasoline pool
- Ask Chevron to eliminate the Unocal gasoline patents

In Summary…

- Whether or not the petroleum demand growth is slowed due to the adoption of alternative fuels -
  - California, Arizona, and Nevada fuels demand will continue to grow
- Assuming that refinery expansion opportunities are limited
  - The bulk of this growth will be supplied by waterborne imports
  - Most of the imports will come into Los Angeles & Long Beach
- Petroleum facilities will have to be expanded to accommodate the imports
  - New solutions have to be found to solve the problems of getting permission to build